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CFETP 2A0X1D
Parts I and II
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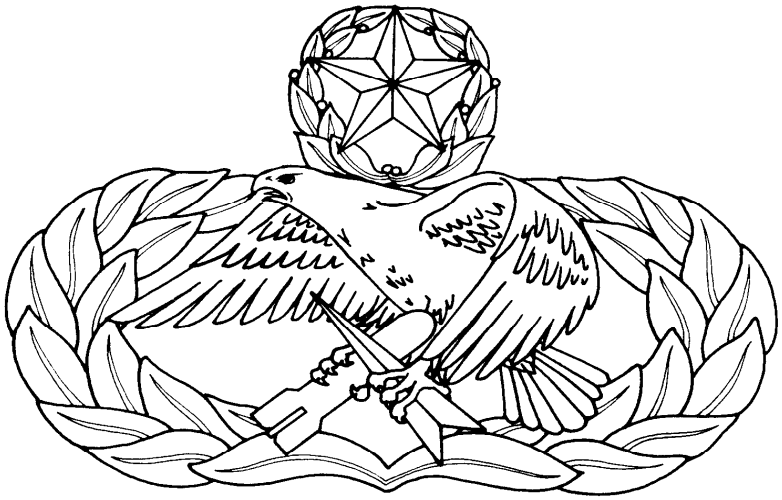
AFSC 2A0X1D

ELECTRONIC WARFARE SYSTEMS

Avionics Test Station And Components



CAREER FIELD EDUCATION

AND TRAINING PLAN

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ELECTRONIC WARFARE SYSTEMS AVIONICS TEST STATION AND COMPONENTS

AFSC 2A0X1D

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ELECTRONIC WARFARE SYSTEMS AVIONICS TEST STATION AND COMPONENTS
CAREER FIELD EDUCATION AND TRAINING PLAN

Part I

Preface

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle education/training requirements, training support resources, and minimum core task requirements for this specialty. The CFETP will provide personnel a clear career path to success and instill rigor in all aspects of career field training. CFETPs are available electronically at http://afpubs.hq.af.mil/. ***NOTE:*** Civilians occupying associated positions will use Part II to support duty position qualification training.

2. The CFETP consists of two parts; both parts of the plan are used by supervisors to plan, manage, and control training within the career field.
2.1. Part I provides information necessary for overall management of the specialty. Section A furnishes general information on CFETP purpose and use, and procedures for coordinating and obtaining approval for updating and publishing the CFETP. Section B identifies career field progression information, duties and responsibilities, training strategies, and career field path. Section C associates each level with specialty qualifications (knowledge, education, training, and other). Section D indicates resource constraints which will impact the execution of education and training such as funds, equipment, and manpower. Section E identifies transition training guide requirements to support career field restructures.
2.2. Part II provides a comprehensive listing of training courses and standards available to support career field training requirements. Section A identifies the Specialty Training Standard (STS) and includes job performance requirements, core tasks, technical references, 3-, 5-, and 7-skill level formal or Career Development Course (CDC) requirements, and the proficiency levels applicable to these courses. Section B contains the course objective list and training standards supervisors use to determine if airmen satisfied training requirements. Section C identifies available support materials. An example is a Qualification Training Package (QTP) developed to support proficiency training. These packages are identified in AFIND8, *Numerical Index of Specialized Educational Training Publications.* Section D identifies a training course index supervisors use to determine available training for the specialty; included here are both mandatory and optional courses. Section E identifies MAJCOM unique training requirements supervisors use to determine additional training requirements unique to the MAJCOM.

3. Using guidance provided in the CFETP will ensure individuals in this specialty receive effective and efficient training at the appropriate point in their career. This plan will enable us to train today's work force for tomorrow's jobs. At unit level, supervisors and trainers will use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

ABBREVIATIONS/TERMS EXPLAINED

Advanced Training (AT). Formal course which provides individuals who are qualified in one or more positions of their Air Force Specialty (AFS) with additional skills/knowledge to enhance their expertise in the career field. Training is for selected career airmen at the advanced level of the AFS.

Air Force Job Qualification Standard (AFJQS). A comprehensive task list which describes a particular job type or duty position. They are used by supervisors to document task qualifications. The tasks on AFJQS are common to all persons serving in the described duty position.

Career Field Education and Training Plan (CFETP). A CFETP is a comprehensive, multipurpose document encapsulating the entire spectrum of education and training for a career field. It outlines a logical growth plan that includes training resources and is designed to make career field training identifiable, to eliminate duplication, and to ensure this training is budget defensible.

Certification. A formal indication of an individual's ability to perform a task to required standards.

Certification Official. A person whom the commander assigns to determine an individual's ability to perform a task to required standards.

Continuation Training. Additional training exceeding requirements with emphasis on present or future duty assignments.

Core Task. Tasks that Air Force Career Field Managers (AFCFMs) identify as a minimum qualification requirements within an AFSC regardless of duty position.

Course Objective List (COL). A publication, derived from initial/advanced skills course training standard, identifying the tasks and knowledge requirements, and respective standards provided to achieve a 3-/7-skill level in this career field. Supervisors use the COL to assist in conducting graduate evaluations in accordance with AFI 36-2201, *Developing, Managing, and Conducting Military Training Programs.*

Enlisted Specialty Training (EST). A mix of formal training (technical school) and informal training (on-the-job) to qualify and upgrade airmen in each skill level of a specialty.

Exportable Training. Additional training via computer assisted, paper text, interactive video, or other necessary means to supplement training.

Field Technical Training (Type 4). Special or regular on-site training conducted by a field training detachment (FTD) or by a mobile training team (MTT).

Initial Skills Training. A formal resident course which results in award of the entry level.

Instructional System Development (ISD). A deliberate and orderly, but flexible process for planning, developing, implementing, and managing instructional systems. It ensures personnel are taught in a cost efficient way the knowledge, skills, and attitudes essential for successful job performance.

Occupational Survey Report (OSR). A detailed report showing the results of an occupational survey of tasks performed within a particular AFS.

On-the-Job Training (OJT). Hands-on, over-the-shoulder training conducted to certify personnel in both upgrade (skill level award) and job qualification (duty position certification) training.

Qualification Training (QT). Actual hands-on task performance training designed to qualify an individual in a specific duty position. This portion of the dual channel on-the-job training program occurs both during and after the upgrade training process. It is designed to provide the performance skills required to do the job.

Qualification Training Package (QTP). An instructional package designed for use at the unit to qualify, or aid qualification, in a duty position or program, or on a piece of equipment. It may be printed, computer-based, or in other audiovisual media.

Resource Constraints. Resource deficiencies, such as money, facilities, time, manpower, and equipment that preclude desired training from being delivered.

Specialized Training Package and COMSEC Qualification Training Package. A composite of lesson plans, test material, instructions, policy, doctrine, and procedures necessary to conduct training. These packages are prepared by AETC, approved by National Security Agency (NSA), and administered by qualified communications security (COMSEC) maintenance personnel.

Specialty Training Standard (STS). An Air Force publication that describes skills and knowledge that airman in a particular Air Force specialty needs on the job. It further serves as a contract between the Air Education and Training Command and the user to show the overall training requirements for an Air Force specialty code that the formal schools teach.

Training Impact Decision System (TIDES). A computer-based decision support technology designed to assist AFCFMs in making critical judgments relevant to what training should be provided to personnel within career fields, when training should be provided (at what career points), and where training should be conducted (training setting).

Upgrade Training (UGT). Mandatory training which leads to attainment of higher level of proficiency.

Utilization and Training Workshop (U&TW). A forum of MAJCOM Air Force Specialty Code (AFSC) functional managers, Subject Matter Experts (SMEs), and AETC training personnel that determines career ladder training requirements.

SECTION A - GENERAL INFORMATION

1. Purpose. This CFETP provides information necessary for Air Force Career Field Managers (AFCFM), MAJCOM functional managers (MFMs), commanders, training managers, supervisors and trainers to plan, develop, manage, and conduct an effective career field training program. This plan outlines the training that individuals in AFSC 2A0X1D should receive to develop and progress throughout their career. This CFETP identifies initial skills, upgrade, qualification, advanced, and proficiency training. Initial skills training is the AFS specific training an individual receives upon entry into the Air Force or upon retraining into this specialty for award of the 3-skill level. This training is conducted by AETC. Upgrade training identifies the mandatory courses, task qualification requirements, and correspondence course completion requirements for award of the 3-, 5-, 7-, and 9-skill levels. Qualification training is actual hands-on task performance training designed to qualify an airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skills/knowledge required to do the job. Advanced training is formal specialty training used for selected airmen. Proficiency training is additional training, either in-residence or exportable advanced training courses, or on-the-job training, provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade. The CFETP has several purposes, some are:

1.1. Serves as a management tool to plan, manage, conduct, and evaluate a career field training program. Also, it is used to help supervisors identify training at the appropriate point in an individual's career.

1.2. Identifies tasks and knowledge training requirements for each skill level in the specialty and recommends education/training throughout each phase of an individual’s career.

1.3. Lists training courses available in the specialty, and identifies sources of training and the training delivery method.

1.4. Identifies major resource constraints which impact full implementation of the desired career field training process.

2. Use. The plan will be used by MFMs and supervisors at all levels to ensure comprehensive and cohesive training programs are available for each individual in the specialty.

2.1. AETC training personnel will develop/revise formal resident, non-resident, Field Training Detachment (FTD), and exportable training based on requirements established by the users and documented in Part II of the CFETP. They will also work with the AFCFM and MFMs to develop acquisition strategies for obtaining resources needed to provide the identified training.

2.2. MFMs will ensure their training programs complement the CFETP mandatory initial, upgrade, and proficiency requirements. Identified requirements can be satisfied by OJT, resident training, contract training, or exportable courses. MAJCOM developed training for this AFSC must be identified for inclusion into CFETP and must not duplicate other training resources.

2.3. Each individual will complete the mandatory training requirements specified in this plan. The list of courses in Part II will be used as a reference to support training.

3. Coordination and Approval. The AFCFM is the approval authority. MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. The AETC training manager will initiate an annual review of this document to ensure currency and accuracy, and eliminate duplicate training.

SECTION B - CAREER PROGRESSION AND INFORMATION

4. Specialty Description.

4.1. Specialty Summary. Performs inspection, calibration, maintenance, and repair on avionics Electronic Warfare (EW) pods. Operates inspects, and maintains special purpose support equipment (SE). Related DoD Occupational Subgroup: 102.

4.2. Duties and Responsibilities.

4.2.1. Electronic Warfare Systems, Avionics Test Station And Components Apprentice and Journeyman. Performs inspection, calibration, maintenance, and repair on EW electronic attack pods. Operates SE to run computer driven and manual tests and diagnostics. Analyzes system performance and determines operational condition. Uses block diagrams, schematics, and technical manuals to solve maintenance problems. Traces signal flow, conducts voltage checks, follows logic, and employs various other techniques to isolate malfunctions. Adjusts or replaces defective subassemblies and components. Uses hand tools, soldering equipment, and test measurement and diagnostic equipment (TMDE). Modifies pods and installs hardware and safety wire. Completes preventive maintenance. Configures and reprograms pods to meet operational requirements. Documents maintenance actions and inspection records.

4.2.2. Electronic Warfare Systems, Avionics Test Station And Components Craftsman. In addition to performing the tasks of a Journeyman, the Craftsman performs supervisory tasks, inspects completed work, and ensures installed components comply with technical publications. Interprets maintenance/installation policies and procedures, identifies maintenance problem areas and recommends corrective action. Ensures spare parts availability. Recommends methods for improving maintenance efficiency. Interprets inspections findings and determines the appropriate corrective action. Evaluates the accuracy of completed inspection and maintenance records. Initiates deficiency reports, maintenance analysis documents, technical data changes, and equipment records. Interprets, establishes, and complies with training, security, and safety standards. Ensures compliance with directives governing the handling, use, and disposal of hazardous waste and materials. Directs and controls maintenance, inspection, and calibrations of EW pods and SE.

4.2.3. Aerospace Maintenance Superintendent. Plans, organizes, and directs avionics maintenance activities. Establishes production controls and work standards. Analyzes reports on the installation, removal, overhaul, repair, calibrations, and modification of avionics systems and associated support equipment. Directs, controls, and plans inspection, removal, replacement, calibration, and repair of avionics systems and associated support equipment. Determines the extent and economy of repair or replacement of components. Coordinates with supply, operations, and other maintenance activities to improve procedures and ensure proper mission support. Establishes and checks inspection procedures. Inspects activities to identify and solve maintenance, supply, manpower, and personnel problems. Interprets findings and recommends corrective action. Ensures compliance with directives governing the handling, use, and disposal of hazardous waste and material. Solves problems and interprets publications for inspection, repair modification, overhaul, removal, installation, and calibration of avionics systems and associated support equipment. Plans and implements budget, modification, and acquisition processes. Plans and executes mobility programs and equipment deployments. Plans physical layout of facilities and ensures support equipment and spare parts availability.

5. Career Skill Progression.

5.1. Apprentice (3) Level. Upon completion of initial skills training an apprentice will work with a trainer to acquire additional knowledge and skills. They will utilize CDCs, Task Qualification Training, and other applicable courses to ensure progress in the career field. The primary focus of an apprentice is mastering the skills required in the career field.

5.2. Journeyman (5) Level. Once upgraded to the 5-skill level, journeymen will enter into continuation training to broaden their experience base. Supervisors are responsible for ensuring journeymen complete all appropriate courses and MAJCOM specific training. Journeymen will attend Airman Leadership School (ALS) after 48 months in the Air Force to prepare them for supervisory duties. Individuals will use CDCs and the Promotion Fitness Examination (PFE) study guide (AFP 36-2241, Vol 1) to prepare for promotion testing under the Weighted Airman Promotion System (WAPS). Journeymen are highly encouraged to further their formal education by pursuing a Community College of the Air Force (CCAF) degree. Journeymen may be assigned job positions such as trainer, lead technician, supervisor (after ALS attendance), equipment custodian, or various other staff positions. The primary focus of a journeyman is performing the mission, expanding and perfecting their professional expertise, and training apprentices.

5.3. Craftsman (7) Level. A craftsman can expect to fill various supervisory and management positions such as shift supervisor, element chief, flight chief, or task certifier. They may also be assigned to work in staff positions. Craftsman are expected to take AF courses to obtain added knowledge on management of resources and personnel in addition to attending 7-level resident course. Individuals promoted to MSgt are highly encouraged to enroll in the Senior Noncommissioned Officer Academy (SNCOA) correspondence course as well as complete their CCAF degree. The primary focus of a craftsman is performing highly complex technical duties, providing supervision and leadership, and developing personnel under their supervision.

5.4. Superintendent (9) Level. A 9-level superintendent can expect to fill positions such as Flight Chief, Production Superintendent, or various staff NCOIC positions. Additional training in the areas of budget, manpower, resources, and personnel management should be pursued through continuing education. Individuals promoted to SMSgt will attend the SNCOA in-residence course. Additional higher education and completion of courses outside their career AFSC are also highly recommended. The primary focus of a superintendent is to provide leadership, manage complex operations, oversee the professional and technical development of personnel, provide feedback and mentoring, form cohesive work teams, and take the lead in achieving, maintaining, and enforcing AF standards and discipline.

6. Training Decisions. The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the Electronic Warfare Systems, Avionics Test Station And Components career field. The spectrum includes a strategy for when, where, and how to meet the training requirements. The strategy must ensure affordable training to eliminate duplication and prevent a fragmented approach to training. The conversion of 2A1X7 Avionics Test Station And Components personnel to 2A0X1D will eliminate the 2A1X7 AFSC. The following training decisions were made at the Utilization and Training Workshop held at Keesler AFB, 26 Feb – 1 Mar 01.

6.1. Initial Skills. The three level course was changed significantly at the U&TW to account for O-level requirements being removed from the course. Removal of the O-level requirements eliminates the need for a two track course. The group decided to lengthen the POD portion of

the tech school and increase the depth of schematic tracing. Increased emphasis was placed on hands-on training by incorporating AN/ALQ-131 (Block 1) pod theory, expanding AN/ALQ-184 pod theory, and adding PATEC training into the course. AN/ALQ-119 pods and AN/ALQ-131 pods will be added to the course for additional hands on training on performing visual inspections and the removal/installation of SRUs.

6.2. Five Level Upgrade Requirements. The number of career development courses (CDCs) was decreased from two courses to one due to the deletion of O-level requirements. The CDC will be comprised of five volumes that include maintenance documentation, safety, general shop practices, test equipment, and electronic warfare pods.

6.3. Seven Level Upgrade Requirements. The 2A177 CDC will be eliminated. Completion of CDC 2AX7X, Aerospace Maintenance Craftsman will be required for upgrade to 7-level. All 2AXXX seven level in-residence training is conducted at Sheppard AFB, TX, effective Oct 01.

6.4. Continuation Training. The purpose of the continuation training program is to provide additional training exceeding minimum upgrade training requirements with emphasis on present and future duty positions. MAJCOMs develop a continuation training program that ensures personnel in the Electronic Warfare Systems, Avionics Test Station And Components career field receive necessary training at the appropriate point in their career. The training program identifies both mandatory and optional training requirements.

7. Community College of the Air Force (CCAF). Enrollment in CCAF occurs upon completion of basic military training. CCAF provides the opportunity to obtain an Associate in Applied Sciences Degree. In addition to its associates degree program, CCAF offers the following:

7.1. Occupational Instructor Certification. Upon completion of instructor qualification training, consisting of an instructor methods course and supervised teaching practicum, CCAF instructors who possess an associate degree or higher and have two years teaching experience may be nominated by their school commander/commandant for certification as an occupational instructor.

7.2. AETC Instructor Requirements. Additional off-duty education is a personal choice that is encouraged for all. Individuals desiring to become an Air Education and Training Command Instructor should be actively pursuing an associate degree. A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools.

8. Career Field Path.

8.1. Enlisted Career Path. Table 8.1 identifies career milestones for the 2A0X1D AFS.

Table 8.1 Enlisted Career Path

Education and Training Requirements	Grade Requirements			
	Rank	Average Sew-On	Earliest Sew-On	High Year Of Tenure (HYT)
Basic Military Training School				
Apprentice Technical School (3-Skill Level)	Amn A1C	6 months 16 months		
Upgrade To Journeyman (5-Skill Level) - Minimum 15 months on-the-job training. - Complete all 5-level core tasks on one MDS. - Complete appropriate CDC if/when available.	Amn A1C SrA	6 months 16 months 3 years	28 months	10 Years
Airman Leadership School (ALS) - Must be a SrA with 48 months time in service or be a SSgt Selectee. - Resident graduation is a prerequisite for SSgt sew-on (Active Duty Only).				
Trainer - Qualified and certified to perform the task to be trained. - Have attended the formal trainer's course and appointed in writing by Commander.	**Certifier** - Be at least a 5-skill level SSgt; and qualified and certified to perform the task being certified - Attend formal certifier course and appointed in writing by Commander. - Be a person other than the trainer.			
Upgrade To Craftsman (7-Skill Level) - Minimum rank of SSgt. - Complete all 5- and 7-level core tasks on one mission design aircraft. - Complete appropriate CDC if/when available. - Advanced Technical School. - Minimum 12 months on-the-job training	SSgt	7.5 years	3 years	20 Years
Noncommissioned Officer Academy (NCOA) - Must be a TSgt or TSgt Selectee. - Resident graduation is a prerequisite for MSgt sew-on (Active Duty Only).	TSgt MSgt	12.5 years 16 years	5 years 8 years	22 Years 24 Years
USAF Senior NCO Academy (SNCOA) - Must be a SMSgt or SMSgt Selectee. - A percentage of top non-select (for promotion to E-8) MSgts attend the SNCOA each year. - Resident or correspondence graduation is a prerequisite for CMSgt sew-on.	SMSgt	19.2 years	11 years	26 Years
Upgrade To Superintendent (9-Skill Level) - Minimum rank of SMSgt.	CMSgt	21.5 years	14 years	30 Years

8.2. Base/Unit Education and Training Manager Checklist:

Table A8.2. Base/Unit Education and Training Manager Checklist		
Requirements for Upgrade to:	**Y**	**N**
Journeyman - Has the apprentice completed mandatory CDCs, if available? - Has the apprentice completed all appropriate 5-level core tasks identified in the CFETP? - Has the apprentice completed all other duty position tasks identified by the supervisor? - Has the apprentice completed 15 months training (9 months for retrainees) for award of the 5-skill level? - Has the apprentice met mandatory requirements listed in specialty description, AFMAN 36-2108 (Airman Classification), and CFETP? - Has the apprentice completed CAMS Course J6AZU00066-058? (Exception: AMC and AMC gained ANG/AFRC Personnel). - Has the apprentice been recommended by their supervisor?		
Craftsman - Has the journeyman achieved the rank of SSgt? - Has the journeyman completed mandatory CDCs? - Has the journeyman completed all core tasks identified in the CFETP? - Has the journeyman completed all other duty position tasks identified by the supervisor? - Has the journeyman completed CAMS Course J6AZU00066-062? (Exception: AMC and AMC gained ANG/AFRC personnel). - Has the journeyman attended 7-skill level Craftsman Course? First, they must complete: -- All 7-level training requirements listed in the CFETP. -- All applicable CDCs. - Has the journeyman completed a minimum 12 months UGT for award of the 7-skill level?		

TO: Squadron/CC

FROM: Squadron Training Manager

SUBJECT: Upgrade Trainee

Trainee is prepared to be upgraded and has completed all training requirements.

_____ _____

Training Manager Supervisor

SECTION C - SKILL LEVEL TRAINING REQUIREMENTS

9. Purpose. Skill level training requirements in this career field are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in general terms and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific task and knowledge training requirements are identified in the STS at Part II, Sections A and B of this CFETP.

10. Specialty Qualification. The various skill levels in this career field are defined in terms of tasks and knowledge proficiency requirements for each skill level. They are stated in broad general terms and establish the standards of performance. The specific task and knowledge training requirements are identified in the STS in Part II, Section A of the CFETP. Unit work centers must develop a structures training program to ensure the following requirements are met.

10.1. Apprentice Level Training.

10.1.1. Specialty Qualification. To perform duties at the apprentice level, an individual must be able to understand basic system theory of operation and be able to perform certain off-equipment tasks under close supervision until task certified.

10.1.1.1. Knowledge. A 3-level apprentice must be able to use technical data, common hand tools, and special purpose test equipment, and apply electrical theory and electronic fundamentals to the calibration and repair of electronic warfare pods. Theory and fundamentals include: binary and hexadecimal numbering systems; Boolean algebra; digital logic; microprocessor controlled systems; address, data, and control bus operation; computer memory; receiver and transmitted principles; microwave and Radio Frequency (RF) characteristics; basic radar principles; basic electronic warfare principles; amplifiers; solid state devices; printed wiring assemblies; wiring diagrams; interpreting schematic diagrams; tracing data/signal flow; setup/use of common and specialized test equipment; and the use of automated support equipment/consoles. Apprentices must also be able to apply common maintenance concepts to include: safety wiring, utilization of the supply system, use/disposal of hazardous waste, safety standards, security measures, and maintenance data documentation.

10.1.1.2. Education. For entry into this specialty, completion of high school with courses in basic electronics, mathematics, general science and physics is desirable.

10.1.1.3. Training. For award of AFSC 2A031D, completion of the Electronic Principles course and AFSC specific training is mandatory.

10.1.1.4. Experience. There is no experience necessary for entry into AFSC 2A0X1D.

10.1.1.5. Other. The following are mandatory as indicated:

10.1.1.5.1. For entry into this specialty, normal color vision as defined in AFI 48-123, *Medical Examination and Standards.*

10.1.1.5.2. For award and retention of AFSCs 2A031D/51D/71D, eligibility for a Secret security clearance according to AFI 31-501, *Personnel Security Management Program.*

10.1.2. Training Sources and Resources. The initial skills courses will provide the required knowledge and qualifications. Initial skills training encompasses basic systems theory of operation, system components, component removal and installation, systems operation, introduction to maintenance concepts, general Avionics Test Station And Components maintenance practices, use of technical publications, maintenance documentation with CAMS, and support equipment familiarization and use.

10.1.3. Implementation. Upon graduation from Basic Military Training, airmen will attend the Electronic Principles course, then attend the 2A0X1D AFSC awarding course. Completion of both courses will result in award of the 3-skill level.
E3AQR2A031D 451, Common Electronic Training Program (CETP) (all students)
E3ABR2A031D 000, Electronic Warfare Systems Apprentice (Avionics Test Station And Components)

10.2. Journeyman Level Training:
10.2.1. Specialty Qualification. In addition to the 3-level qualifications:
10.2.1.1. Knowledge. In addition to meeting the 3-level knowledge requirements, a 5-level journeyman must be task qualified on CAMS Standard Base Supply System (SBSS), the use of technical orders (TOs), select test equipment, operation of automatic test stations, minimum performance checks of electronic warfare pods, repair and fabrication of coaxial cables, loading, verifying, and reprogramming pods, periodic and special inspections, Composite Tool Kit (CKT) inventory and maintenance, ground handling of pods and test equipment, Electrostatic Discharge (ESD) identification and handling, safety wiring, soldering techniques, appropriate use of hand tools, use of torque tools, and the inspection of electronic warfare pods and automated test stations.
10.2.1.2. Education. No other education requirements are required. All additional education will be in the form of OJT and completion of CDCs.
10.2.1.3. Training. For award of AFSC 2A051D, completion of all applicable core tasks, 5-level CDCs, and CAMS course J6ANU00066-043 are required.
10.2.1.4. Experience. Qualification in and possession of AFSC 2A031D is mandatory for the award of the AFSC 2A051D in addition to experience running Periodic Maintenance Inspections (PMIs) and isolating/correcting malfunctions associated with electronic warfare pods.
10.2.1.5. Other. The following are mandatory as indicated:
10.2.1.5.1. For entry into this specialty, normal color vision as defined in AFI 48-123, *Medical Examination and Standards.*
10.2.1.5.2. For award and retention of AFSCs 2A031D/51D/71D, eligibility for a Secret security clearance according to AFI 31-501, *Personnel Security Management Program.*
10.2.2. Training Sources and Resources. The 5-level CDC provides the career knowledge training required. Qualification training and OJT will provide training and qualification on the applicable core tasks identified in the STS. The CDC is written to build from the trainee's current knowledge and provides more in depth knowledge to support OJT requirements.
10.2.3. Implementation. Training to the 5-level is performed by the units, utilizing the STS/JQS, exportable courses, and CDCs. Upgrade to the 5-level requires completion of the 2A051D CDCs, completion of all 5-level core tasks, completion of CAMS course J6AZU00066-043 and any additional MAJCOM/unit requirements.
10.3. Craftsman Level Training:
10.3.1. Specialty Qualification. In addition to the 5-level qualifications:
10.3.1.1. Knowledge. In addition to meeting the 3 and 5 skill level knowledge requirements, a 7-level craftsman must be able to supervise and use resources to ensure effective planning, scheduling, and maintenance. A craftsman will also be task qualified to maintain training records, maintenance scheduling and documentation, 180 day automatic test station inspections, repair/fabrication of multi-pin connectors and cables, operate reprogramming systems, and use STU-III secure telephones.

10.3.1.2. Education. There are no additional education requirements beyond those defined for the apprentice level.
10.3.1.3. Training. For award of AFSC 2A071D, completion of applicable core tasks, 7-level CDCs, and attendance to the 7-level resident course are required.
10.3.1.4. Experience. Qualification in and possession of AFSC 2A051D is mandatory for the award of the AFSC 2A071D.
10.3.1.5. Other. The following are mandatory as indicated:
10.3.1.5.1. For entry into this specialty, normal color vision as defined in AFI 48-123, *Medical Examination and Standards.*
10.3.1.5.2. For award and retention of AFSCs 2A031D/51D/71D, eligibility for a Secret security clearance according to AFI 31-501, *Personnel Security Management Program.*
10.3.2. Training Sources and Resources. Seven-level upgrade training will be conducted by certified trainers using applicable core tasks, MAJCOM/unit specific courses and requirements, applicable 7-level CDCs, and the 7-level resident course. The resident course and 7-level CDCs are written to provide advanced theory and troubleshooting skills.
10.3.3. Implementation. Upgrade to the 7-level will require completion of the 7-level CDCs, all 5 and 7-level core tasks, any mandatory exportable courses, resident course, and 18 months OJT after selection to SSgt.
10.4. Superintendent Level Training:
10.4.1. Specialty Qualification. In addition to 7-level qualifications:
10.4.1.1. Knowledge. In addition to meeting the 3, 5, and 7 skill level knowledge requirements, a 9-level Superintendent needs to be an effective leader and possess knowledge in the areas of: supervision and management techniques, mentoring, building cohesive teams, providing constructive feedback, enforcement of military standards, forecasting, planning, budgeting, and managing funding and other assigned resources, personnel programs, base support programs, environmental standards, as well as maintenance activities.
10.4.1.2. Education. There are no additional requirements beyond those defined for the apprentice level.
10.4.1.3. Training. For award of AFSC 2A190, promotion to SMSgt is mandatory.
10.4.1.4. Experience. Qualification in and possession of AFSC 2A071D is mandatory for the award of the AFSC 2A090.
10.4.1.5. Other. The following are mandatory as indicated:
10.4.1.5.1. For entry into this specialty, normal color vision as defined in AFI 48-123, *Medical Examination and Standards.*
10.4.1.5.2. For award and retention of AFSC 2A190, eligibility for a Secret security clearance according to AFI 31-501, *Personnel Security Management Program.*
10.4.2. Training Sources and Resources. OJT will be used for training.
10.4.3. Implementation. The 9-level will be awarded after completing MAJCOM requirements, unit OJT, and promoted to SMSgt.

SECTION D - RESOURCE CONSTRAINTS

11. Purpose. This section identifies known resource constraints which preclude optimum/desired training from being developed or conducted, including information such as cost and manpower. Narrative explanations of each resource constraint and an impact statement describing what effect each constraint has on training are included. Also included in this section are actions required, Office of Primary Responsibility (OPR), and target completion dates. Resource constraints will be, as a minimum, reviewed and updated annually.

12. Apprentice Level Training: There are no constraints.

13. Five Level Training. There are no constraints.

14. Seven-Level Training. There are no constraints.

SECTION E - TRANSITIONAL TRAINING GUIDE (TTG)

15. AFSC Conversion. Scheduled to convert 2A1X7 personnel to 2A0X1D AFSC in Oct 02.
15.1. Initial Skills Training (3-level). Deletion of the O-level items eliminates the need for the two track course. The initial skills course will focus on Avionics Test Station And Components maintenance and pod theory. The course is decreasing from a 64 day course to an estimated 44 day course. CDCs will be revised as applicable.
15.2. Journeyman/Craftsman (5-level). There is no training required for this conversion.

Part II

SECTION A - SPECIALTY TRAINING STANDARD

1. Implementation. This STS will be used for technical training provided by Air Education and Training Command for classes beginning Dec 01.

2. Purpose. As prescribed in AFI 36-2201, this STS:
2.1. Lists in column 1 (Task, Knowledge, and Technical Reference) the most common tasks, knowledge, and technical references (TR) necessary for airman to perform duties in the 3-, 5-, and 7-skill level.
2.2. Identifies in column 2 (Core Tasks) by asterisk (*), specialty-wide training requirements. As a minimum, certification on all core tasks applicable to the specialty must be completed for skill level upgrade. Exemptions:
2.2.1. Core tasks which are not applicable to base assigned aircraft or equipment are not required for upgrade (units are not required to send personnel TDY for core task training).
2.2.2. For units with more than one mission design (e.g. A-10) aircraft, upgrade trainees need only complete core tasks on a single mission design. MFMs, unit commanders, and/or supervisors may require trainees to complete core task training on additional mission design aircraft, if desired. If some of these core tasks involve training in another unit on base, trainees must still complete all core tasks relevant to at least one mission design aircraft. All units are bound by the requirements in this CFETP and will accommodate core task trainees from other units.
2.2.3. Units that use the GO81 maintenance data collection system do not need to complete Core Automated Maintenance System (CAMS) Computer Based Training (CBT) core tasks. However, these units must be capable of training CAMS related CBT core tasks for deployment preparation. This capability ensures GO81 users are capable of operating CAMS prior to deploying to CAMS using units.
2.3. Provides certification for OJT. Column 3 is used to record completion of tasks and knowledge training requirements. Use automated training management systems to document technician qualifications, if available. Task certification must show a certification/completed date.
2.4. Shows formal training and correspondence course requirements. Column 4 shows the proficiency to be demonstrated on the job by the graduate as a result of training on the task/knowledge and career knowledge provided by the correspondence course. When two codes are used in columns 4A and 4C(1) (e.g. 2b/b), the first code is the established requirement for resident training on the task/knowledge, and the second code indicates the level of training provided in the course due to equipment shortages or other resource constraints. Tasks and knowledge items shown with a proficiency code are trained during wartime. For current CDC listings, visit the Air Force Institute for Advanced Distributed Learning (AFIADL) website at http://www.au.af.mil/au/afiadl/.
2.5. Qualitative Requirements. Attachment 1 contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and career development courses.
2.6. Job Qualification Standard. Becomes a job qualification standard (JQS) for on-the-job training when placed in AF Form 623, On-The-Job Training Record, and used according to AFI

36-2201. For OJT, the tasks in column 1 are trained and qualified to the go/no go level. "Go" means the individual can perform the task without assistance and meets local requirements for accuracy, timeliness, and correct procedures. When used as a JQS, the following requirements apply:

2.6.1. Documentation and Certification. Document and certify completion of training IAW AFMAN 36-2247, Chapter 5. Automated records, utilizing Core Automated Management System (CAMS) or Integrated maintenance Data System (IMDS)/Global Combat Support System (GCSS), reflecting this STS may be used and are highly encouraged. Use of attachments one and two is mandatory in individual training records along with CFETP Part I and Part II, Section A. Identify duty position requirements by circling (in pencil) the subparagraph number next to the task statement. As a minimum, complete the following columns in Part 2 of the CFETP: Tng Complete (3B), Trainee Initials (3C), Trainer Initials (3D), and Certifier Initials(3E for core tasks only). Trainers may sign off non-core and non-critical tasks by initialing the trainer's column; third party certification is not required for non-core and non-critical tasks. There are no approved AFJQS for this AFSC.

2.6.1.1. Converting from Old Document to CFETP. All AFJQSs and previous CFETPs are replaced by this CFETP; therefore, conversion of all training records to this CFETP STS is mandatory. Use this CFETP STS (or automated STS) to identify and certify all past and current qualifications.

2.6.1.1.1. For those core and critical tasks previously certified and required in the current duty position, evaluate current qualifications and when verified, recertify using current date as completion date, and enter trainee's and certifier's initials. Remember, during the transcription process no training is taking place. Therefore, the trainer's initials are not required.

2.6.1.1.2. For non-core and non-critical tasks previously certified and required in the current duty position, evaluate current qualifications and when verified, recertify using current date as completion date, and enter trainee's and trainer's initials.

2.6.1.1.3. When transcribing previous certification for tasks not required in the current duty position, carry forward only the previous completion date of certification (not the initials of another person). If and when transcribed tasks become duty position requirements, recertify using standard certification procedures.

2.6.1.1.4. The person whose initials appear in the trainer or certifier block during the transcription process must meet the requirements of their respective roles.

2.6.1.1.5. Upon completion of the transcription process, give the old CFETP to the member.

2.6.1.2. Documenting Career Knowledge. When a CDC is not available, the supervisor identifies CFETP Part II, STS training references that the trainee requires for career knowledge and ensures, as a minimum, that trainees cover the mandatory items in AFI 26-2108. For two-time CDC course exam failures, the supervisor identifies all STS items corresponding to the areas covered by the CDC. The trainee completes a study of STS references, undergoes evaluation by the task certifier, and receives certification on the STS. ***NOTE: Supervisors must document successful completion of career knowledge prior to submission of a CDC waiver.***

2.6.1.3. Decertification and Recertification. When an airman is found to be unqualified on a task previously certified for his or her position, the supervisor lines through the previous certification or deletes previous certification when using automated system. Appropriate remarks are entered on the AF Form 623A, **On-The-Job Training Record Continuation Sheet**, as to the reason for decertification. The individual is recertified (if required) either by erasing

the old entries and writing in the new or by using correction fluid/tape (if the entries were made in ink) over the previously certified entry.

2.6.2. AF Form 797. When additional items not listed in the CFETP Part II are necessary in the current duty assignment, enter them on the AF Form 797. Fill out the form IAW AFMAN 36-2247.

2.6.3. Disposition of Training Records. Upon separation, retirement, commissioning, or promotion to Master Sergeant (unless otherwise directed by the AFCFM, MAJCOM, unit commander, or supervisor), give the individual their training records. Also, give individuals outdated training records after transcribing records. Do not remove any training records that show past qualifications unless transcribed to a new CFETP/AFJQS. For example, an individual working in tool crib or staff position must maintain documented career field qualifications in case they return to direct maintenance duty. Supervisors must exercise good judgment when removing training records not needed in current duty positions.

2.7. Specialty Training Standard (STS). The STS is a guide for development of promotion tests used in the Weighted Airman Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the USAF Occupational Measurement Squadron by senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members as most appropriate for promotion to higher grades. Questions are based upon study references listed in the WAPS catalog. Individual responsibilities are in chapter 14 of AFI 36-2606, *US Air Force Reenlistment, Retention, and NCO Status Programs*. WAPS is not applicable to the Air National Guard or Air Force Reserve.

3. Recommendations. Report unsatisfactory performance of individual course graduates to the AETC training manager at 332 TRS/TRR, 613 Hangar Rd, Rm 151, Keesler AFB, MS 39534-2237, DSN 597-3195. Reference specific STS paragraphs. For your convenience, a customer service information line (CSIL) is available 24 hours a day at DSN 736-2574. The CSIL is managed by 81 TRG/TGET, Training Evaluations, and may be reached via email at 81trg-tget@keesler.af.mil.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

MICHAEL E. ZETTLER, Lieutenant General, USAF
DCS/Installations and Logistics

3 Attachments
1. Proficiency Code Key
2. STS, Knowledge and Performance Requirements for 2A0X1D
3. Electronic Fundamentals Applications

THIS BLOCK IS FOR IDENTIFICATION PURPOSES ONLY		
NAME OF TRAINEE		
Printed Name (*Last, First, Middle Initial*)	**Initials (Written*)***	**SSN**
PRINTED NAME OF CERTIFYING OFFICIAL AND WRITTEN INITIALS		
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	

QUALITATIVE REQUIREMENTS

PROFICIENCY CODE KEY		
	Scale Value	Definition: The individual
Task Performance Levels	**1**	**Can do simple parts of the task. Needs to be told or shown how to do most of the task. (EXTREMELY LIMITED)**
	2	**Can do most parts of the task. Needs only help on hardest parts. (PARTIALLY PROFICIENT)**
	3	**Can do all parts of the task. Needs only a spot check of completed work. (COMPETENT)**
	4	**Can do the complete task quickly and accurately. Can tell or show others how to do the task. (HIGHLY PROFICIENT)**
***Task Knowledge Levels**	**a**	**Can name parts, tools, and simple facts about the task. (NOMENCLATURE)**
	b	**Can determine step by step procedures for doing the task. (PROCEDURES)**
	c	**Can identify why and when the task must be done and why each step is needed. (OPERATING PRINCIPLES)**
	d	**Can predict, isolate, and resolve problems about the task. (ADVANCED THEORY)**
****Subject Knowledge Levels**	**A**	**Can identify basic facts and terms about the subject. (FACTS)**
	B	**Can identify relationship of basic facts and state general principles about the subject. (PRINCIPLES)**
	C	**Can analyze facts and principles and draw conclusions about the subject. (ANALYSIS)**
	D	**Can evaluate conditions and make proper decisions about the subject. (EVALUATION)**

Explanations

*** A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Example: b and 1b)**

**** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.**

- This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC.

/ This mark is used in course columns to show the level of training required but not given or given at a lower proficiency level due to limitations in resources. (Ex: 3c/-, 2b/b)

Note: Tasks and knowledge items shown with a proficiency code are trained during wartime.

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A2.1. CAREER LADDER PROGRESSION TR: AFMAN 36-2108													
A2.1.1. Progression in career ladder 2A0X1D								A	-	-	-	-	-
A2.1.2. Duties of AFSC 2A031D/51D/71D								B	-	-	-	-	-
A2.2. SECURITY TR: DODR 5200-1; AFSSI 4100; AFI 31-401, 21-109, 31-101 Vol 1, AFI 10-1101													
A2.2.1. Communications Security (OPSEC)													
A2.2.1.1. Prevent security violations	*							b	-	-	-	-	-
A2.2.1.2. Use of MAJCOM/FOA Critical Information Listing	*							b	-	-	-	-	-
A2.2.1.3. Observe security precautions	*							b	-	-	B	-	-
A2.2.1.4. Specific operational security (OPSEC) vulnerabilities of AFSC 2A0X1D TR: AFI 10-1101								A	-	-	-	-	-
A2.2.3. Information Security													
A2.2.3.1. Safeguard classified equipment	*							b	-	-	B	-	-
A2.2.3.2. Safeguard classified information	*							b	-	-	-	-	-
A2.2.4. Use system security classification guides TR: Applicable weapons security guides	*							a	-	-	B	-	-
A2.3. SUPERVISION TR: AFI 21-101, AFPD 21-1, AFI 23-100 series and 22-101, TO 31-1-75													
A2.3.1. Counsel personnel TR: AFP 50-34 Vol 1								-	-	-	-	-	-
A2.3.2. Conduct feedback sessions TR: AFP 39-15								-	-	-	-	-	-
A2.3.3. Write performance reports TR: AFI 36-2403, 36-2907								-	-	-	-	-	-
A2.3.4. Orient newly assigned personnel TR: AFMAN 36-2108, AFI 36-2201								-	-	-	-	-	-
A2.3.5. Make personnel assignment								-	-	-	-	-	-
A2.3.6. Schedule work assignments								-	-	-	-	-	-
A2.3.7. Establish performance standards								-	-	-	-	-	-
A2.3.8. Evaluate compliance with performance standards								-	-	-	-	-	-
A2.3.9. Write correspondence TR: AFMAN 37-137								-	-	-	-	-	-
A2.3.10. Air Force Electronic Publishing Library (AFEPL), Form Flow, PowerPoint, and Word								-	-	-	-	-	-
A2.3.11. Direct shop maintenance activities								-	-	-	-	-	-
A2.3.12. Determine work priorities								-	-	-	-	-	-

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A2.3.13. Conduct inspections TR: TO 00-20-1 (Sec 3 & 4)								-	-	-	-	-	-
A2.3.13.1. Performing self-inspection TR: AFI 90-201								-	-	-	-	B	-
A2.3.14. Determine resource requirements TR: AFMAN 23-110V2CD, TO 00-20-1 (Sec II), AFI 23-100 series and 21-101, 22-101								-	-	-	-	-	-
A2.3.15. Review maintenance documentation TR: AFMAN 66-279								-	-	-	-	-	-
A2.3.16. Maintain maintenance status boards								-	-	-	-	-	-
A2.3.17. Coordinate test, measurement, and diagnostic equipment (TMDE) support TR: TOs 00-20-6, 33-1-27, 33K-1-100, 00-20-14								-	-	-	-	-	-
A2.3.18. Coordinate with base supply TR: TO 00-20-1, AFMAN 23-110V2CD								-	-	-	-	-	-
A2.3.19. Evaluate completed maintenance								-	-	-	B	-	-
A2.3.20. Implement security program TR: DODR 5200.1-R, 5200.2-R, AFI 31-201, 31-401, 31-501, 31-601								-	-	-	-	-	-
A2.3.21. Promote safety program TR: AFI 91-213, 91-301								-	-	-	-	-	-
A2.3.22. Prepare recommendations for awards and decorations TR: AFI 36-2803								-	-	-	-	-	-
A2.3.23. Review supply requisitions TR: AFMAN 23-110V2CD								-	-	-	-	-	-
A2.3.24. Interpret/Establish work methods TR: AFI 21-101								-	-	-	-	-	-
A2.3.24.1. Team Leader												c	
A2.3.24.2. Production Supervisor												c	
A2.3.25. Interpret policies, directives, or procedures for subordinates TR: AFI 36-2241								-	-	-	-	-	-
A2.3.26. Direct training program TR: AFI 36-2201								-	-	-	-	-	-
A2.3.27. Interpret/Establish work controls TR: AFI 21-101													
A2.3.27.1. Team Leader												c	
A2.3.27.2. Production Supervisor												c	
A2.4. SAFETY TR: AFI 91-200, and 91-300 series, TO 31-1-141-1													
A2.4.1. AF Occupational Safety and Health													
A2.4.1.1. Hazards of AFSC 2A0X1D								A	-	-	B	-	-

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A2.4.1.2. Air Force Occupational Safety and Health (AFOSH) standards								A	-	-	B	-	-
A2.4.2. Foreign Object Damage (FOD) program; Dropped Object Prevention (DOP) TR: AFI 21-101								B	-	-	-	-	-
A2.5. HAZARDOUS MATERIALS AND WASTE HANDLING ACCORDING TO ENVIRONMENT STANDARDS TR: AFI 32-7000 series, AFPD 32-71													
A2.5.1. Types of hazardous materials/fluids								B	-	-	-	-	-
A2.5.2. Handling procedures								B	-	-	-	-	-
A2.5.3. Storage and labeling								B	-	-	-	-	-
A2.5.4. Proper disposal								B	-	-	-	-	-
A2.5.5. Material Safety Data Sheet (MSDS)								A	-	-	-	-	-
A2.6. TRAINING TR: AFI 36-2201													
A2.6.1. Prepare Job Qualification Standards (JQS)								-	-	-	-	2b	-
A2.6.2. Plan on the job training (OJT)								-	-	-	-	-	-
A2.6.3. Supervise OJT								-	-	-	-	-	-
A2.6.4. Conduct OJT								-	-	-	-	-	-
A2.6.5. Evaluate													
A2.6.5.1. Training								-	-	-	-	-	-
A2.6.5.1.1. Effectiveness of resident training								-	-	-	-	2c	-
A2.6.5.2. Trainers								-	-	-	-	-	-
A2.6.5.3. Trainees								-	-	-	-	-	-
A2.6.6. Maintain training records		*						-	-	-	-	3c	-
A2.6.7. Recommend personnel for training TR: AFI 36-2101, 36-2201, 36-2623, AFMAN 36-2108, AFCAT 36-2223								-	-	-	-	-	-
A2.6.7.1. Evaluate personnel to determine need for training TR: AFI 36-2201, AFMAN 36-2247								-	-	-	-	2c	-
A2.6.8. Career Field Education and Training Plan (CFETP) TR: AFMAN 36-2245								-	-	-	-	-	-
A2.6.9. Specialty Training Standard (STS)								-	-	-	-	-	-
A2.6.10. Occupational Survey Report (OSR)								-	-	-	-	-	-
A2.6.11. Utilization and Training Workshop (U&TW)								-	-	-	-	-	-
A2.6.12. Accountability and AF core values								-	-	-	-	-	-

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A2.7. MAINTENANCE MANAGEMENT AND INSPECTION TR: AFI 21-100 series, AFPD 21-1													
A2.7.1. Maintenance organization structure and functions TR: AFIs 21-101, 38-101								A	-	-	B	B	-
A2.7.2. Operations/Logistic Group Commander Responsibilities								A	-	-	B	-	-
A2.7.3. Expediter, Production Supervisor, and Flight Chief duties and responsibilities								A	-	-	B	-	-
A2.7.4. LOGISTIC AND RESOURCE MANAGEMENT TR: AFI 23-100 series, 21-101, 22-101, TO 00-20-3													
A2.7.4.1. Logistics management								-	-	-	-	-	-
A2.7.4.2. Resource management								-	-	-	-	-	-
A2.7.4.3. Technical Order management								-	-	-	-	-	-
A2.7.4.4. Product Improvement Program TR: TO 00-35D-54, AFCSM 21-578, Vol. 2													
A2.7.4.4.1. Deficiency Reporting system								-	-	-	B	B	-
A2.7.4.4.2. Initiate Deficiency Reports								-	-	-	-	-	-
A2.7.4.4.3. AFTO Form 135, SMR Code Change Request								-	-	-	B	-	-
A2.7.4.4.4. Modification proposal								-	-	-	-	-	-
A2.7.4.4.5. Warranty TR: AFM 64-110								-	-	-	-	B	-
A2.7.5. Maintenance data documentation system TR: TO-00-20-2													
A2.7.5.1. Purpose								A	-	-	B	-	-
A2.7.5.2. Complete AFTO Forms (244, 349, and 350)								2b	-	-	B	-	-
A2.7.5.3. AFTO Form 95								A	-	-	-	-	-
A2.7.5.4. Work Center Event (WCE)								2b	-	-	B	-	-
A2.7.5.5. Creating jobs								2b	-	-	B	-	-
A2.7.5.6. Clearing jobs								2b	-	-	B	-	-
A2.7.6.1. CAMS (CBT: J6ANU00066-043)													
A2.7.6.1.1. Maintenance scheduling and documentation		*						2b	-	-	B	-	-
A2.7.6.1.2. Use Standard Base Supply System (SBSS) Interface TR: AFCSM 21-579, Vol. 2	*							2b	-	-	B	c	-
A2.7.6.1.3. Training management subsystem								-	-	-	-	-	-

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A2.7.6.1.4. Extract on-line data TR: AFCSM 21-559, Vol. 2; 21-561, Vol. 2; 21-562, Vol. 2; 21-563, Vol. 2; 21-564, Vol. 2; 21-565, Vol. 2; 21-566, Vol. 2; 21-568, Vol. 2; 21-569, Vol. 2; 21-570, Vol. 2; 21-579, Vol. 2								-	-	-	-	c	-
A2.7.6.2. GO 81								-	-	-	-	-	-
A2.7.6.3. RAMPOD TR: TOs 33D7-3-326-8-1, 12P3-2A-198-1: CPIN								A	-	-	-	-	-
A2.7.7. AF Gold TR: AFI 21-123								-	-	-	-	-	-
A2.7.8. Configuration management and Equipment modification								-	-	-	-	-	-
A2.7.9. Maintenance incident investigation and Prevention								-	-	-	-	-	-
A2.7.10. Historical records on Pods								-	-	-	-	-	-
A2.7.11. Status reports								-	-	-	-	-	-
A2.7.12. Equipment monitoring													
A2.7.12.1. Pods								-	-	-	-	-	-
A2.7.12.2. Test stations								-	-	-	-	-	-
A2.7.13. Correlate basic functions within the operations complex. TR: AFI 11-401, 11-406, applicable MAJCOM instructions.								-	-	-	-	-	-
A2.7.14. Correlate basic functions within the logistics complex TR: applicable MAJCOM instructions								-	-	-	-	-	-
A2.7.15. Use Maintenance Data Collection System products. TR: applicable MAJCOM instructions								-	-	-	-	-	-
A2.7.16. Use Maintenance Systems TR: AFI 21-109, applicable MAJCOM instructions								-	-	-	-	-	-
A2.7.17. Use inspection systems TR: TO 00-20 series, applicable MAJCOM instructions								-	-	-	-	-	-
A2.7.17.1. Inspection systems TR: TO 00-20-5								-	-	-	-	B	-
A2.7.18. Evaluate off-equipment maintenance data. TR: TO 00-20 series, applicable MAJCOM instructions								-	-	-	-	-	-
A2.7.19. Status of Resources and Training System (SORTS) TR: AFI 10-201								-	-	-	-	A	-
A2.8. AF TECHNICAL ORDERS TR: 00-5 series TOs, AFR 66-19, AFPD 21-3													
A2.8.1. AF technical order system								A	-	-	-	-	-
A2.8.2. Use technical orders TR: Applicable Aircraft and equipment TOs	*							2b	-	-	B	-	-

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A2.8.3. Maintain technical publication files								-	-	-	-	-	-
A2.8.4. Technical order improvement reports								A	-	-	B	-	-
A2.9. AF SUPPLY DISCIPLINE TR: AFMAN 23-110V2CD, AFI 23 series													
A2.9.1. Use condition tags								2b	-	-	A	-	-
A2.9.2. Use issue slips/turn-in requests (AF Form 2005)								2b	-	-	A	-	-
A2.9.3. Use allowance sources to determine equipment requirements								-	-	-	-	-	-
A2.9.4. Process and control repair cycle assets								A	-	-	B	-	-
A2.9.5. Depot Level Reparable (DLR) and Material Support Division								A	-	-	B	-	-
A2.9.6. Lean Logistics								-	-	-	A	-	-
A2.9.7. Supply concepts								-	-	-	-	-	-
A2.9.8. Supply documents management								-	-	-	-	-	-
A2.9.8.1. Monitor supply automated data listings TR: AFMAN 23-110, Vol. 2, Pt 13								-	-	-	-	2b	-
A2.9.9. Equipment account management: CA/CRL, PMEL, and ADPE TR: TO 00-20-14								-	-	-	-	-	-
A2.9.10. Priority system								-	-	-	-	-	-
A2.9.11. Processing and controlling material TR: Applicable MAJCOM Instructions													
A2.9.11.1. Determine Authorizations								-	-	-	-	-	-
A2.9.11.2. Review and correct supply documents								-	-	-	-	-	-
A2.9.11.3. Determine Equipment Status								-	-	-	-	-	-
A2.9.11.4. Request adjusted stock levels								-	-	-	-	-	-
A2.9.12. Perform requisition procedures TR: AFMAN 23-110, Vol. 2, Pt 13								-	-	-	-	2b	-
A2.10. TEST EQUIPMENT TR: Applicable technical data													
A2.10.1. Principles of application								B	-	-	-	-	-
A2.10.2. Verify operating condition								2b	-	-	-	-	-
A2.10.3. Use test equipment													
A2.10.3.1. Oscilloscope (Measure: voltage, time, and frequency)	*							-	-	-	B	-	-
A2.10.3.2. Universal Counter								2b	-	-	B	-	-

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A2.10.3.3. Multimeter (Measure: voltage and resistance)	*							-	-	-	B	-	-
A2.10.3.4. Spectrum Analyzer	*							2b	-	-	B	-	-
A2.10.3.5. Power Meter								2b	-	-	B	-	-
A2.10.3.6. Frequency Counter								2b	-	-	B	-	-
A2.10.3.7. Scalar Network Analyzer								2b	-	-	B	-	-
A2.10.3.8. Pulse Generator								2b	-	-	B	-	-
A2.10.3.9. Sweep Oscillator								2b	-	-	B	-	-
A2.10.3.10. Radio frequency radiation monitor								B	-	-	-	-	-
A2.10.3.11. Bus Network Analyzer								-	-	-	-	-	-
A2.10.4. Automatic Test Stations (includes cradles, A2.-frames, cooler, and distribution panels)													
A2.10.4.1. Inspect													
A2.10.4.1.1. Daily								2b	-	-	-	-	-
A2.10.4.1.2. Weekly								2b	-	-	-	-	-
A2.10.4.1.3. Monthly								2b	-	-	-	-	-
A2.10.4.1.4. 180 day		*						A	-	-	-	-	-
A2.10.4.1.5. Visual								-	-	-	-	-	-
A2.10.4.2. Service								-	-	-	-	-	-
A2.10.4.3 Operate	*							2b	-	-	-	-	-
A2.10.4.3.1. Files and directory maintenance								A	-	-	-	-	-
A2.10.4.4. Troubleshoot								-	-	-	-	-	-
A2.10.4.5. Repair								-	-	-	-	-	-
A2.10.5. Portable Automated Equipment Calibrator (PATEC)													
A2.10.5.1. Theory and Operation								A	-	-	B	-	-
A2.10.5.2. Traceability of Standards TR: 00-20-14								A	-	-	B	-	-
A2.10.5.3. Calibration Documentation TR: 00-20-14								2b	-	-	B	-	-
A2.10.5.4. Uninterrupted Power Requirements								A	-	-	B	-	-
A2.10.5.5. Verify Calibration of AN/ALM-233 Automated Support Equipment (ASE)								b	-	-	-	-	-
A2.11. ELECTRONIC WARFARE PRINCIPLES TR: AFP 51-45, AFI 10-700 series													
A2.11.1. Electronic Warfare combat principles													
A2.11.1.1. Electronic combat								A	-	-	B	-	-
A2.11.1.2. Directed Radio Frequency (RF) radiation								A	-	-	B	-	-

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A2.11.1.3. Electronic Warfare categories								A	-	-	B	-	-
A2.11.1.4. Integrated Air defense systems								A	-	-	B	-	-
A2.11.2. EW pod principles TR: Applicable technical data													
A2.11.2.1. Operational capabilities								B	-	-	B	-	-
A2.11.2.2. Theory of operation								B	-	-	B	-	-
A2.12. I-LEVEL MAINTENANCE TR: TO 00-25-234, 31-1-75, Applicable technical data													
A2.12.1. Use appropriate safety procedures								2b	-	-	b	-	-
A2.12.2. Perform visual inspection of shop replacement units (SRU)								2b	-	-	B	-	-
A2.12.3. Interconnect test equipment with SRU								2b	-	-	-	-	-
A2.12.4. Accomplish minimum performance checks of Electronic Warfare pods	*							2b	-	-	-	-	-
A2.12.5. Isolate defective subassemblies of EW pods								2b	-	-	-	-	-
A2.12.6. Remove/Install subassemblies								2b	-	-	-	-	-
A2.12.7. Repair subassemblies								-	-	-	-	-	-
A2.12.8. Adjust EW system/subsystem to technical order specifications								-	-	-	-	-	-
A2.12.9. Coaxial cables TR: TO 31-10-14													
A2.12.9.1. Repair	*							-	-	-	-	-	-
A2.12.9.2. Fabricate	*							-	-	-	b	-	-
A2.12.10. Multi-pin connectors/cables TR: TO 31-10-14													
A2.12.10.1. Repair		*						-	-	-	-	-	-
A2.12.10.2. Fabricate		*						-	-	-	b	-	-
A2.13. REPROGRAMMING SYSTEMS TR: AFI 10-703 and Applicable technical data													
A2.13.1. Reprogramming principles								B	-	-	B	-	-
A2.13.2. Reprogramming techniques								B	-	-	B	-	-
A2.13.3. Operate reprogramming systems													
A2.13.3.1. Program Loader Verifier (PLV)		*						2b	-	-	b	-	-
A2.13.3.2. AN/GYQ-59/A								-	-	-	-	-	-
A2.13.3.3. AN/APM 1 Common Aircraft Portable Reprogramming Equipment (CAPRE)		*						2b	-	-	b	-	-
A2.13.3.4. STU-III		*						A	-	-	-	-	-
A2.13.3.5. SIPRNET								-	-	-	-	-	-

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A2.13.3.6. Load/Verify/Reprogram pods	*							2b	-	-	-	-	-
A2.13.4. Maintain reprogramming systems													
A2.13.4.1. PLV (695), etc.								-	-	-	-	-	-
A2.13.4.2. AN/GYQ-59/A								-	-	-	-	-	-
A2.14. PREVENTIVE MAINTENANCE TR: Applicable technical data; TOs 1-1-689, 00-20-1, 00-25-234													
A2.14.1. Equipment components													
A2.14.1.1. Clean								a	-	-	A	-	-
A2.14.1.2. Lubricate								a	-	-	A	-	-
A2.14.1.3. Perform corrosion control								a	-	-	B	-	-
A2.14.2. Perform equipment inspections TR: Applicable technical data													
A2.14.2.1. Periodic	*							-	-	-	-	-	-
A2.14.2.2. Special	*							-	-	-	-	-	-
A2.15. GENERAL MAINTENANCE TR: TO 31-7-75, 32-1-101, and Applicable technical data													
A2.15.1. Crate/uncrate EW equipment								-	-	-	-	-	-
A2.15.2 . Composite Tool Kit (CTK) TR: AFI 21-101													
A2.15.2.1. Inventory	*							2b	-	-	B	-	-
A2.15.2.2. Maintain	*							-	-	-	-	-	-
A2.15.3. Ground handling													
A2.15.3.1. Pods	*							-	-	-	B	-	-
A2.15.3.2. Test equipment	*							-	-	-	-	-	-
A2.15.3.3. Lifting devices								-	-	-	-	-	-
A2.15.3.3.1. Inspect								-	-	-	-	-	-
A2.15.3.3.2. Operate								-	-	-	-	-	-
A2.15.5. Electrostatic Discharge (ESD) sensitive devices TR: TO 00-25-234, Applicable TOs													
A2.15.5.1. Identification of ESD	*							B	-	-	B	-	-
A2.15.5.2. Use proper ESD handling procedures	*							2b	-	-	b	b	-
A2.15.6. Perform safety wiring	*							2b	-	-	b	-	-
A2.15.7. Use appropriate soldering techniques	*							-	-	-	b	-	-
A2.15.8. Use appropriate hand tools	*							2b	-	-	b	-	-

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A2.15.9. Use torque indicating tools TR: TO 32B14-3-1-101, Applicable system TOs	*							2b	-	-	b	-	-
A2.15.10. Use schematic diagrams and logic trees								2b	-	-	-	-	-
A2.15.11. Read schematics and wiring/block diagrams								-	-	-	-	2b	-
A2.15.12. Perform analytical troubleshooting								-	-	-	-	2b	-
A2.16. COMPUTERS TR: AFI 33 & 63 series, AFIND 27, and Applicable publications													
A2.16.1 Hardware principles													
A2.16.1.1. Motherboards, Central Processor Unit								-	-	-	B	-	-
A2.16.1.2. Random Access Memory								-	-	-	B	-	-
A2.16.1.3. Input/Output interfaces								-	-	-	B	-	-
A2.16.1.4. Peripherals (Drives, Printers, Keyboards)								-	-	-	B	-	-
A2.16.1.5. Hardware removal and installation								-	-	-	b	-	-
A2.16.2. Software fundamentals													
A2.16.2.1. BIOS/Kernels								-	-	-	B	-	-
A2.16.2.2. Operating systems								-	-	-	B	-	-
A2.16.2.3. Graphical User Interfaces (GUI)								-	-	-	B	-	-

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			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A3.1. BASIC TERMS													
A3.1.1. Metric notation													
A3.1.1.1. Electrical prefixes								B	-	-	-	-	-
A3.1.1.2. Powers of ten (scientific notation)								B	-	-	-	-	-
A3.1.2. Direct Current (DC) terms								B	-	-	-	-	-
A3.1.3. Alternating Current (AC) terms								B	-	-	-	-	-
A3.2. BASIC CIRCUITS													
A3.2.1. Theory of operation								B	-	-	-	-	-
A3.2.2. Troubleshoot circuits								2b	-	-	-	-	-
A3.3. BASIC CIRCUIT CALCULATIONS													
A3.3.1. DC								B	-	-	-	-	-
A3.3.2. AC								B	-	-	-	-	-
A3.4. RESISTORS													
A3.4.1. Theory of operation								B	-	-	-	-	-
A3.4.2. Troubleshoot resistors								2b	-	-	-	-	-
A3.4.3. Color code								B	-	-	-	-	-
A3.5. RELAYS AND SOLENOIDS													
A3.5.1. Relay theory of operation								B	-	-	-	-	-
A3.5.2. Troubleshoot relays								2b	-	-	-	-	-
A3.5.3. Solenoid theory of operation								B	-	-	-	-	-
A3.5.4. Troubleshooting solenoids								-	-	-	-	-	-
A3.6. INDUCTORS													
A3.6.1. Theory of operation								B	-	-	-	-	-
A3.6.2. Troubleshoot inductors								2b	-	-	-	-	-
A3.6.3. Calculations								B	-	-	-	-	-
A3.7. CAPACITORS													
A3.7.1. Theory of operation								B	-	-	-	-	-
A3.7.2. Troubleshoot capacitors								2b	-	-	-	-	-
A3.7.3. Calculations								B	-	-	-	-	-
A3.7.4. Color code								-	-	-	-	-	-
A3.8. TRANSFORMERS													
A3.8.1. Theory of operation								B	-	-	-	-	-
A3.8.2. Troubleshoot transformers								2b	-	-	-	-	-
A3.8.3. Calculations								B	-	-	-	-	-

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A3.9. THREE PHASE TRANSFORMERS													
A3.9.1. Theory of operation								B	-	-	-	-	-
A3.9.2. Troubleshoot three phase transformers								-	-	-	-	-	-
A3.10. DC MOTORS													
A3.10.1. Theory of operation								-	-	-	-	-	-
A3.10.2. Troubleshoot DC motors								-	-	-	-	-	-
A3.11. AC MOTORS													
A3.11.1. Theory of operation								-	-	-	-	-	-
A3.11.2. Troubleshoot AC motors								-	-	-	-	-	-
A3.12. DC GENERATORS													
A3.12.1. Theory of operation								-	-	-	-	-	-
A3.12.2. Troubleshoot DC generators								-	-	-	-	-	-
A3.13. AC GENERATORS													
A3.13.1. Theory of operation								-	-	-	-	-	-
A3.13.2. Troubleshoot AC generators								-	-	-	-	-	-
A3.14. ALTERNATORS													
A3.14.1. Theory of operation								-	-	-	-	-	-
A3.14.2. Troubleshoot alternators								-	-	-	-	-	-
A3.15. SYNCHRO/SERVOS													
A3.15.1. Theory of operation								-	-	-	-	-	-
A3.15.2. Troubleshoot synchro/servos								-	-	-	-	-	-
A3.16. CHOPPERS (SYNCHRO VIBRATORS)													
A3.16.1. Theory of operation								-	-	-	-	-	-
A3.16.2. Troubleshoot choppers								-	-	-	-	-	-
A3.17. TRANSDUCERS													
A3.17.1. Theory of operation								-	-	-	-	-	-
A3.17.2. Troubleshoot transducers								-	-	-	-	-	-
A3.18. METER MOVEMENT													
A3.18.1. Theory of operation								B	-	-	-	-	-
A3.18.2. Troubleshoot meter movements								-	-	-	-	-	-
A3.19. SOLID STATE DIODE													
A3.19.1. Theory of operation								B	-	-	B	-	-
A3.19.2. Troubleshoot solid state diodes								2b	-	-	-	-	-
A3.19.3. Specifications								-	-	-	-	-	-

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			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A3.19.4. Color code								-	-	-	-	-	-
A3.20. BIPOLAR JUNCTION TRANSISTORS													
A3.20.1. Theory of operation								B	-	-	-	-	-
A3.20.2. Troubleshoot bipolar junction transistors								2b	-	-	-	-	-
A3.20.3. Specifications								-	-	-	-	-	-
A3.21. INTEGRATED CIRCUIT (IC)													
A3.21.1. Familiarization								B	-	-	B	-	-
A3.21.2. Troubleshoot ICs								-	-	-	B	-	-
A3.21.3. Specifications								-	-	-	-	-	-
A3.22. SOLID STATE SPECIAL PURPOSE DEVICES													
A3.22.1. Theory of operation													
A3.22.1.1. Silicon Controlled Rectifier								B	-	-	B	-	-
A3.22.1.2. Zener Diode								B	-	-	B	-	-
A3.22.1.3. Tunnel Diode								B	-	-	B	-	-
A3.22.1.4. Light Emitting Diode (LED)								B	-	-	B	-	-
A3.22.1.5. Liquid Crystal Diode (LCD)								B	-	-	B	-	-
A3.22.1.6. Uni-Junction Transistor (UJT)								B	-	-	B	-	-
A3.22.1.7. Junction Field Effect Transistor (JFET)								B	-	-	B	-	-
A3.22.1.8. Metal Oxide Semiconductor Field Effect Transistor (MOSFET)								B	-	-	B	-	-
A3.22.1.9. Positive Intrinsic Negative (PIN) Diode								B	-	-	B	-	-
A3.22.1.10. Varactor								B	-	-	B	-	-
A3.22.2. Troubleshoot solid state special purpose devices								2b	-	-	-	-	-
A3.23. ELECTRON TUBES													
A3.23.1. Theory of operation								B	-	-	-	-	-
A3.23.2. Troubleshoot electron tubes								-	-	-	-	-	-
A3.23.3. Specifications								-	-	-	-	-	-
A3.24. CATHODE RAY TUBES (CRT)													
A3.24.1. Theory of operation								B	-	-	B	-	-
A3.24.2. Troubleshoot CRTs								-	-	-	-	-	-
A3.25. SOLDER AND DESOLDER													
A3.25.1. Terminal connections													
A3.25.1.1. Terminal connections with assistance								2b	-	-	-	-	-
A3.25.1.2. Terminal connections without assistance								3c/-	-	-	-	-	-

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	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A3.25.2. Printed Circuit Boards (PCB)													
A3.25.2.1. PCB with assistance								2b	-	-	-	-	-
A3.25.2.2. PCB without assistance								3c/-	-	-	-	-	-
A3.25.3. Multi-pin connectors													
A3.25.3.1. Multi-pin connectors with assistance								2b	-	-	-	-	-
A3.25.3.2. Multi-pin connectors without assistance								3c/-	-	-	-	-	-
A3.25.4. Coaxial connectors													
A3.25.4.1. Coaxial connectors with assistance								2b	-	-	-	-	-
A3.25.4.2. Coaxial connectors without assistance								3c/-	-	-	-	-	-
A3.26. ASSEMBLE SOLDERLESS CONNECTORS													
A3.26.1. Crimp connections								2b	-	-	-	-	-
A3.26.2. Coaxial connectors								2b	-	-	-	-	-
A3.26.3. Multi-pin connectors								2b	-	-	-	-	-
A3.27. TEST EQUIPMENT USAGE													
A3.27.1. Analog Multimeter								2b	-	-	-	-	-
A3.27.2. Oscilloscope								2b	-	-	-	-	-
A3.27.3. Signal Generator								-	-	-	-	-	-
A3.27.4. Frequency Counter								-	-	-	-	-	-
A3.27.5. Spectrum Analyzer								-	-	-	-	-	-
A3.27.6. Field Strength Tester								-	-	-	-	-	-
A3.27.7. Digital Multimeter								2b	-	-	-	-	-
A3.27.8. Digital Logic Probe								-	-	-	-	-	-
A3.27.9. Capacitor Tester								-	-	-	-	-	-
A3.27.10. Capacitor Substitution Box								-	-	-	-	-	-
A3.27.11. DC Restorer								-	-	-	-	-	-
A3.27.12. Logic Current Tracer								-	-	-	-	-	-
A3.27.13. Tube Tester								-	-	-	-	-	-
A3.27.14. Logic Pulser								-	-	-	-	-	-
A3.27.15. Logic Analyzer								-	-	-	-	-	-
A3.27.16. Signature Analyzer								-	-	-	-	-	-
A3.27.17. Reflectometer								-	-	-	-	-	-
A3.28. TRANSISTOR AMPLIFIER CIRCUITS													
A3.28.1. Theory of operation													

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A3.28.1.1. Amplifier circuits								B	-	-	-	-	-
A3.28.1.2. Stabilization circuits								B	-	-	-	-	-
A3.28.1.3. Coupling circuits								B	-	-	-	-	-
A3.28.2. Troubleshoot transistor amplifier circuits								2b	-	-	-	-	-
A3.29. ELECTRON TUBE AMPLIFIERS													
A3.29.1. Theory of operation								B	-	-	-	-	-
A3.29.2. Troubleshoot electron tube amplifiers								-	-	-	-	-	-
A3.30. OPERATIONAL AMPLIFIER													
A3.30.1. Theory of operation								B	-	-	-	-	-
A3.30.2. Troubleshoot operational amplifiers								-	-	-	-	-	-
A3.31. MAGNETIC AMPLIFIERS													
A3.31.1. Theory of operation								-	-	-	-	-	-
A3.31.2. Troubleshoot magnetic amplifiers								-	-	-	-	-	-
A3.32. SATURABLE REACTORS													
A3.32.1. Theory of operation								-	-	-	-	-	-
A3.32.2. Troubleshoot saturable reactors								-	-	-	-	-	-
A3.33. POWER SUPPLY CIRUITS													
A3.33.1. Theory of operation													
A3.33.1.1. Rectifier								B	-	-	-	-	-
A3.33.1.2. Filters								B	-	-	-	-	-
A3.33.2. Troubleshoot power supply circuits								2b	-	-	-	-	-
A3.34. VOLTAGE REGULATORS													
A3.34.1. Theory of operation								B	-	-	-	-	-
A3.34.2. Troubleshoot voltage regulators								2b	-	-	-	-	-
A3.35. RESISTIVE-CAPACITIVE-INDUCTIVE (RCL) CIRCUITS													
A3.35.1. Basic operation								B	-	-	-	-	-
A3.35.2. Resonant operation								B	-	-	-	-	-
A3.35.3. Troubleshoot RCL circuits								2b	-	-	-	-	-
A3.35.4. Calculations								B	-	-	-	-	-
A3.36. FREQUENCY SENSITIVE FILTERS													
A3.36.1. Theory of operation								B	-	-	-	-	-
A3.36.2. Troubleshoot frequency sensitive filters								2b	-	-	-	-	-
A3.36.3. Calculations								-	-	-	-	-	-
A3.37. WAVE GENERATING CIRCUITS													

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A3.37.1. Theory of operation													
A3.37.1.1. Oscillators								B	-	-	-	-	-
A3.37.1.2. Multivibrators								B	-	-	-	-	-
A3.37.1.3. Waveshaping circuits								B	-	-	-	-	-
A3.37.2. Troubleshoot wave generating circuits								2b	-	-	-	-	-
A3.38. LIMITER CIRCUITS													
A3.38.1. Theory of operation													
A3.38.1.1. Diode								B	-	-	-	-	-
A3.38.1.2. Zener diode								B	-	-	-	-	-
A3.38.1.3. Transistor								B	-	-	-	-	-
A3.38.2. Troubleshoot limiter circuits								-	-	-	-	-	-
A3.39. CLAMPER CIRCUITS													
A3.39.1. Theory of operation								B	-	-	-	-	-
A3.39.2. Troubleshoot clamper circuits								-	-	-	-	-	-
A3.40. DIGITAL NUMBERING SYSTEMS													
A3.40.1. Conversions													
A3.40.1.1. Binary								B	-	-	-	-	-
A3.40.1.2. Octal								B	-	-	-	-	-
A3.40.1.3. Hexadecimal								B	-	-	-	-	-
A3.40.2. Math operations													
A3.40.2.1. Binary								B	-	-	-	-	-
A3.40.2.2. Octal								B	-	-	-	-	-
A3.40.2.3. Hexadecimal								B	-	-	-	-	-
A3.40.3. Binary coded decimal								B	-	-	-	-	-
A3.41. DIGITAL LOGIC FUNCTIONS													
A3.41.1. Theory of operation													
A3.41.1.1. Main logic gates								B	-	-	B	-	-
A3.41.1.2. Flip-flops								B	-	-	B	-	-
A3.41.2. Troubleshoot digital logic circuits								2b	-	-	-	-	-
A3.41.3. Logic families								B	-	-	-	-	-
A3.42. BOOLEAN EQUATIONS													
A3.42.1. Diagram to equation								-	-	-	-	-	-
A3.42.2. Equation to diagram								-	-	-	-	-	-
A3.42.3. Simplify equations								-	-	-	-	-	-

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A3.43. COMPUTERS													
A3.43.1. Operation principles								B	-	-	B	-	-
A3.43.2. Load programs								-	-	-	-	-	-
A3.43.3. Write and debug programs								-	-	-	-	-	-
A3.43.4. Programming languages								-	-	-	-	-	-
A3.43.5. Troubleshoot computer subassemblies or circuits								2b	-	-	-	-	-
A3.43.6. Types of memories								B	-	-	B	-	-
A3.43.7. Peripheral devices								B	-	-	B	-	-
A3.44. MICROPROCESSOR CONTROLLED SYSTEMS													
A3.44.1. Basic (Universal) microprocessor theory of operation								B	-	-	-	-	-
A3.44.2. 8085 (Specific) Microprocessor													
A3.44.2.1. Theory of operation								-	-	-	-	-	-
A3.44.2.2. Troubleshoot								-	-	-	-	-	-
A3.45. LOGIC CIRCUITS													
A3.45.1. Theory of operation													
A3.45.1.1. Counters								B	-	-	-	-	-
A3.45.1.2. Registers								B	-	-	-	-	-
A3.45.1.3. Combinational logic circuits								B	-	-	-	-	-
A3.45.2. Troubleshoot logic (combinational) circuits								2b	-	-	-	-	-
A3.46. DIGITAL TO ANALOG (DA) AND ANALOG TO DIGITAL (AD) CONVERTERS													
A3.46.1. Theory of operation													
A3.46.1.1. Weighted resistor DA								B	-	-	-	-	-
A3.46.1.2. Approximation AD								B	-	-	-	-	-
A3.46.1.3. Ramp AD								B	-	-	-	-	-
A3.46.2. Troubleshoot converters								-	-	-	-	-	-
A3.47. TRANSMISSION LINES													
A3.47.1. Theory of operation								B	-	-	B	-	-
A3.47.2. Perform measurement								-	-	-	-	-	-
A3.47.3. Calculations								-	-	-	-	-	-
A3.47.4. Troubleshoot transmission lines								-	-	-	-	-	-
A3.48. WAVEGUIDES													
A3.48.1. Theory of operation								B	-	-	B	-	-

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A3.48.2. Troubleshoot waveguides								-	-	-	-	-	-
A3.49. MICROWAVE OSCILLATORS & AMPLIFIERS													
A3.49.1. Theory of operation								B	-	-	B	-	-
A3.49.2. Tune or adjust								-	-	-	-	-	-
A3.49.3. Troubleshoot microwave oscillators and/or amplifiers								-	-	-	-	-	-
A3.50. RESONANT CAVITIES													
A3.50.1. Theory of operation								B	-	-	-	-	-
A3.50.2. Troubleshoot resonant cavities								-	-	-	-	-	-
A3.50.3. Tune and adjust								-	-	-	-	-	-
A3.51. TRANSMITTERS													
A3.51.1. Theory of operation													
A3.51.1.1. Amplitude Modulation (AM)								B	-	-	-	-	-
A3.51.1.2. Frequency Modulation (FM)								B	-	-	-	-	-
A3.51.1.3. Single Side Band (SSB)								B	-	-	-	-	-
A3.51.1.4. Pulse Modulation (PM)								B	-	-	-	-	-
A3.51.2. Troubleshoot transmitters								-	-	-	-	-	-
A3.52. RECEIVERS													
A3.52.1. Theory of operation													
A3.52.1.1. Amplitude Modulation (AM)								B	-	-	-	-	-
A3.52.1.2. Frequency Modulation (FM)								B	-	-	-	-	-
A3.52.1.3. Single Side Band (SSB)								B	-	-	-	-	-
A3.52.1.4. Pulse Modulation (PM)								B	-	-	-	-	-
A3.52.2. Troubleshoot receivers								-	-	-	-	-	-
A53. TRANSMISSION POWER													
A3.53.1. Perform measurements								-	-	-	b	-	-
A3.53.2. Calculations								-	-	-	b	-	-
A3.54. ANTENNAS													
A3.54.1. Theory of operation								B	-	-	-	-	-
A3.54.2. Perform alignments								-	-	-	-	-	-
A3.54.3. Troubleshoot antennas								-	-	-	-	-	-
A3.55. MICROPHONES													
A3.55.1. Theory of operation								-	-	-	-	-	-
A3.55.2. Troubleshoot microphones								-	-	-	-	-	-

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)					
			A	B	C	D	E	A 3 Skill Level		B 5 Skill Level		C 7 Skill Level	
	5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Course	(2) CDC	(1) Course	(2) CDC	(1) Course	(2) CDC
A3.56. SPEAKERS													
A3.56.1. Theory of operation								-	-	-	-	-	-
A3.56.2. Troubleshoot speakers								-	-	-	-	-	-
A3.57. PHOTOSENSITIVE DEVICES													
A3.57.1. Theory of operation								B	-	-	-	-	-
A3.57.2. Troubleshoot photosensitive devices								-	-	-	-	-	-
A3.58. DISPLAY TUBES													
A3.58.1. Theory of operation								-	-	-	-	-	-
A3.58.2. Troubleshoot display tubes								-	-	-	-	-	-
A3.59. SUPPORT SUBJECTS													
A3.59.1. Safety applicable to electronics								B	-	-	-	-	-
A3.59.2. First aid for electrical shock								B	-	-	-	-	-
A3.59.3. Electrostatic Discharge (ESD) control								B	-	-	-	-	-
A3.59.4. Electronic effects on electronic equipment								B	-	-	-	-	-

SECTION B - COURSE OBJECTIVE LIST

4. Measurement. Each proficiency coded STS task or knowledge item taught at the technical school is measured through the use of an objective. An objective is a written instruction for the student so he or she knows what is expected of them to successfully complete training on each task. Each objective is comprised of a condition, behavior, and standard which states what is expected of the student for each task. The condition is the setting in which the training takes place (i.e. TOs, type of equipment, etc). The behavior is the observable portion of the objective (i.e. remove fuel control). The standard is the level of performance that is measured to ensure the STS proficiency code level is attained.

5. Standard. The standard is 70% on written examinations. Standards for performance objectives are indicated in the objective and are also indicated on the individual progress check checklist. The checklist is used by the instructor to document each students progress on each task. Instructor assistance is provided as needed during the progress check, and students may be required to repeat all or part of the behavior until satisfactory performance is attained. Students must satisfactorily complete all progress checks prior to taking the written test.

6. Proficiency Level. Review column 4A of the STS to determine the proficiency level of a particular task or knowledge item. Review the proficiency code key in Part II, Section A of this CFETP for an explanation of the proficiency codes. Most task performance is taught to the "2b" proficiency level which means the students can do most parts of the task, but does need assistance on the hardest parts of the task (partially proficient). The student can also determine step by step procedures for doing the task. For tasks that are taught to the "3c" proficiency level, students can do all parts of the task and only require a spot check on completed work (competent). The student can also identify why and when a task must be done and why each step is needed.

7. Course Objective. The detailed listing of initial skills or craftsman course objectives may be obtained by submitting a written request to the AETC Training Manager, 332 TRS/TRR, 613 Hangar Rd. Rm 151, Keesler AFB, MS 39534-2237.

SECTION C – SUPPORT MATERIAL

8. The following list of support materials is not all inclusive; however, it covers the most frequently referenced areas. For further information on the following courses, contact the OPR at:

81 TRSS/TSQ
601 D Street
Keesler AFB, MS 39534-2229
DSN 597-3692

COURSE NUMBER	COURSE TITLE	DEVELOPER
*AFQTP 2EXXX-201L	Communications-Electronics (C-E) Workcenter Manager's Handbook	81 TRSS/TSQ
*AFQTP 2EXXX-201LB	Communications-Electronics Manager's Handbook	81 TRSS/TSQ
*AFQTP 2EXXX-201G	Maintenance Support	81 TRSS/TSQ
*AFQTP 2EXXX-201P	Workcenter Test Equipment Management	81 TRSS/TSQ
*AFQTP 2EXXX-201J	Maintenance Training Program	81 TRSS/TSQ

*Courses can be downloaded from Q Flight web page at:
https://wwwmil.keesler.af.mil/81trss/qflight/welcome.html

SECTION D – TRAINING COURSE INDEX

9. Purpose. This section of the CFETP identifies training courses available for the specialty and shows how the courses are used by each MAJCOM in their career field training programs.

10. Air Force In-Residence Courses. Contact the course OPR at:

332 TRS/TRR
613 Hangar Rd. Rm 151
Keesler AFB, MS 39534-2237
DSN 597-3195
Fax DSN 597-2084

COURSE NO.	COURSE TITLE	OPR
E3ABR2A031D 000	Electronic Warfare Systems Avionics Test Station And Components	332 TRS
E3AZR2A051D 000	AN/ALQ-184(V) I Level Maintenance	332 TRS

11. Air Force Institute for Advanced Distributed Learning (AFIADL). A current listing of available Career Development Courses (CDCs) may be accessed at the AFIADL website at: http://www.au.af.mil/au/afiadl/

12. Exportable Course. Contact the course OPRs at:

367 TRSS/TSIE
6058 Aspen Avenue
Hill AFB, UT 84056-5805
DSN 777-7830/8741

362 TRS/TRR
613 10th Avenue
Sheppard AFB, TX 73611-2352
DSN 736-6184

COURSE NO.	COURSE TITLE	OPR
J6ANU00066 038	Air Force Technical Order System General	362 TRS
J6ANU00066 039	Air Force Technical Order System Advanced	362 TRS
J6ANU00066 041	CAMS for Metals Technicians	362 TRS
J6ANU00066 042	CAMS for AGE Technicians	362 TRS
J6ANU00066 043	CAMS for Flightline/Backshop	362 TRS

13. Training Detachment (TD) Courses. Contact the course OPR at:

372 TRS
912 I Avenue, Suite 3
Sheppard AFB, TX 76311-2361
DSN 736-2046

COURSE NO.	COURSE TITLE	OPR
2A1X7-040	AN/ALQ-184(V)5,6, Electronic Countermeasures Pod (I-Level)	372 TRS
2A1X7-041	AN/ALQ-131 (Block II) Electronic Warfare System Technical	372 TRS

14. Courses Under Development/Revision. N/A

SECTION E – MAJCOM UNIQUE REQUIREMENTS

15. MAJCOM Courses. N/A